

REMARKS

Claims 1-18 were originally filed. Claims 6 and 10-12 stand objected to. Claims 1-5, 7-9, and 13-18 stand rejected. Claims 1, 6-7, 10, and 13-15 were amended. Claims 1-18 remain in the application.

Claims 6 and 10-12 stand objected to as being dependent upon a rejected base claim, but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 6 and 10 have been so rewritten. Claims 11-12 are allowable as depending from Claim 10.

Claims 1-5, 7-9, and 13-14 stand rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita (U.S. Patent 5,343,302).

Claim 1 has been amended to state:

1. An image processing method for compensating for light falloff in a digital image, said method comprising the steps of:
 - providing an input digital image comprised of image pixels;
 - providing individual compensation values to correct light falloff in one or more of the image pixels, whereby the individual compensation values induce a balance change in the digital image;
 - determining a balance value, which is independent of location within the digital image; and
 - applying the individual compensation values and the balance value to said one or more pixels of the input digital image to provide a corrected image having compensation for light falloff with minimal change to the light balance.

The language of Claim 1 is supported by the application as filed, notably, the original claims and at page 10, lines 7-8.

Unlike Yamashita, Claim 1 requires the determining of a balance value that is independent of location within the digital image. The application states:

"The balance value Q is not dependent on position within the digital image $a(x,y)$." (application, page 10, lines 7-8)

The rejection relied upon Yamashita, col. 4, lines 24-27 to disclose a "balance value":

"The correction signals provided through adjustment controls 27, 28 and 29 to multipliers 30, 31 and 32 there multiply the image signals received from preamplifiers 5, 6 and 7, respectively."

The correction signals are from a limiting circuit via a switch. (Yamashita, col. 4, lines 7-11 and 18-20) The action of the limiting circuit is described:

"It is to be noted that the gain to be applied to the image signal at each of the multipliers 30, 31 and 32 increases by the extent to which a waveform shown in FIG. 2 is below reference level S. Curves P1-P5 shown in FIG. 2 are respectively waveforms of various signals output by limiting circuit 23 in dependence on the signal level of the parabolic signal received by limiting circuit 23 from mixer 21." (Yamashita, col. 3, lines 55-62; emphasis added)

"In FIG. 2 the vertical axis represents increasing voltage, and the horizontal axis represents distance in one direction or another from the center of the image." (Yamashita, col. 3, lines 49-51; emphasis added; also see the instant Office Action at page 3 in the discussion of Claim 2)

Claims 2-5 are allowable as depending from Claim 1 and as follows.

Claim 2 states:

2. The method as claimed in claim 1 wherein the step of providing individual compensation values comprises the steps of:
providing falloff compensation information which varies depending on location within the digital image; and
using the falloff compensation information to generate individual compensation values for said one or more pixels.

Claim 2 requires both generating of individual compensation values that vary depending upon location and (from Claim 1) determining a balance value, which is independent of location within the digital image. Where is this disclosed in the cited references?

Claim 3 is allowable on the same grounds as Claim 2.

Claim 4 states:

4. The method as claimed in claim 2 wherein the step of determining a balance value uses the falloff compensation information to determine a balance value.

Claim 4 is allowable as depending from Claim 2 and as follows. Claim 4 requires that the determining of a balance value that is (from Claim 1) independent of location within the digital image using falloff compensation information, that is, dependent upon location. Where is this disclosed in the cited references?

Claim 5 is allowable as depending from Claim 3 and on the same grounds as Claim 4.

Claim 7 was amended to add the language: "said balance value being independent of location within the digital image", and is supported and allowable on the same grounds as Claim 1.

Claim 9 are allowable as depending from Claim 7.

Claims 13-14 are supported and allowable on the same grounds as Claims 1 and 7.

Claim 8 stands rejected under 103 U.S.C. 103(a) as being unpatentable over Yamashita as applied to claim 7, and further in view of Enomoto (U.S. Patent 6,323,934). Claim 8 is allowable as depending from Claim 7.

Claims 15-18 stand rejected under 103 U.S.C. 103(a) as being unpatentable over Yamashita as applied to claims 1-4. Claim 15 is supported and allowable on the same grounds as Claims 1, 7, and 13-14.

Claims 16-18 are allowable as depending from Claim 15 and as follows.

Claim 16-17 are allowable on the same grounds as Claims 2-3

Claim 18 is allowable on the same grounds as Claim 4.

It is believed that these changes now make the claims clear and definite and, if there are any problems with these changes, Applicants' attorney would appreciate a telephone call.

In view of the foregoing, it is believed none of the references, taken singly or in combination, disclose the claimed invention. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Robert Luke Walker", written in black ink.

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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.